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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/042,424      | 01/10/2002  | Herman Lai           | 12643 B             | 2514             |

7590 02/24/2004

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New York, NY 10038

EXAMINER

CIRIC, LJILJANA V

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3753

DATE MAILED: 02/24/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/042,424

Applicant(s)

LAI ET AL.

Examiner

Ljiljana (Lil) V. Ciric

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) no claims is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Election/Restriction*

1. Applicant's election without proper traverse of the first species, readable on claims 1 through 14, in Paper No. 7 is acknowledged.
2. No claims are hereby withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

### *Drawings*

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the first and second magnetic members as described in the specification with any structural detail. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 6 recites first and second magnetic members disposed in the first and second driving devices respectively, but the originally filed disclosure (including the drawings) fail to clearly describe the configurations and operation of these magnetic members, thus failing to satisfy the written description requirement for the claimed subject matter.

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6. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear what the magnetic members recited in claim 6 comprise, nor is their exact configuration and operation ever disclosed. It is not even known whether these are known in the art or whether they have been invented by the applicant. Thus, one skilled in the art would not know how to make and use the invention including these magnetic members.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1 through 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

To avoid confusion, the same terminology (i.e., "upper portion" and "lower portion" should not be used for the respective upper and lower portions of the container and the upper and lower portions of the housing.

It is not clear what particular structure corresponds to the first and second magnetic members as recited in claim 6, for example.

The term "close" in claim 5 is a relative term which renders the claim indefinite. The term "close" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Thus, as used to qualify the relative distance between the first and the second driving devices, this term renders the same indeterminate and claim 5 indefinite with regard to the scope of protection sought.

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With regard to claim 11 as written, it is not clear whether the fluid recited in line 3 thereof refers to the same fluid as the fluid received in the container, thus rendering claim 11 and all claims depending therefrom indefinite. It is also not clear to which fluids the limitation "said fluids" in line 4 of the claim read.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. As best can be understood in view of the indefiniteness of the claims, claims 1, 8 through 11; 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Wasserman.

Wasserman discloses a heat exchanging device essentially as claimed, including: a container or tank 98 for receiving a fluid or water 100; a housing or vertical stack formed of tires 10; a tube 90 extended through the housing for receiving another fluid (i.e., a phase change material which is inherently a fluid at some point); a pump 106 readable on the means for pumping the fluid or water between the container or tank 98 and the housing formed of tires 10; a casing enclosing passageway 70 and forming a chamber between the housing and the casing as seen in Figure 1, with tube 90 including a coil portion within the peripheral chamber as also seen in Figure 1; heat storing and releasing rocks 36 readable on the heating means as recited in claim 10 of the instant application; and, a pipe 92 for receiving the fluid from the container or tank 98.

The reference thus reads on the claims.

***Allowable Subject Matter***

11. As best can be understood in view of the indefiniteness of the claims, claims 2 through 7 and 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, first and/or second

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paragraphs, as set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Conclusion*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Martinelli et al. (both references), Polyak, Jr., Hogan, and Gudmundsson each discloses a heat exchanger device including a housing and a fan or pump.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric, whose telephone number is (703) 308-3925.

While she works a flexible schedule that varies from day to day and from week to week, Examiner Ciric may generally be reached at the Office during the work week between the hours of 10 a.m. and 6 p.m. ET.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel, can be reached on (703) 308-1272.

The NEW central official fax phone number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

lvc

February 7, 2004

  
LJILJANA V. CIRIC  
PRIMARY EXAMINER  
ART UNIT 3753